

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING**

### **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: \_\_\_\_\_

Source: \_\_\_\_\_

Date Processed by STIC: \_\_\_\_\_

10/578,493  
IFWP  
05/17/2006

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , **EFS Submission User Manual - ePAVE**)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):**  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

### Raw Sequence Listing Error Summary

## ERROR DETECTED

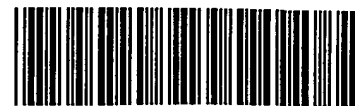
### **SUGGESTED CORRECTION**

**SERIAL NUMBER:**

$$\underline{10/578,493}$$

**ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE**

- |    |  |  |
|----|--|--|
| 1  | _____ Wrapped Nucleic<br>Wrapped Aminos  | The number/line at the end of each line “wrapped” down to the next line. This may occur if your file was retrieved in a word processor <b>after</b> creating it. Please adjust your right margin to .3; this will prevent “wrapping.”  |
| 2  | _____ Invalid Line Length                | The rules require that a line <b>not exceed</b> 72 characters in length. This includes white spaces.   |
| 3  | _____ Misaligned Amino<br>Numbering      | The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do <b>not</b> use tab codes between numbers; use <b>space characters</b> , instead.   |
| 4  | _____ Non-ASCII                          | The submitted file was <b>not</b> saved in ASCII(DOS) text, as <b>required</b> by the Sequence Rules. <b>Please ensure your subsequent submission is saved in ASCII text.</b>  |
| 5  | _____ Variable Length                    | Sequence(s)_____ contain n’s or Xaa’s representing more than one residue. <b>Per Sequence Rules, each n or Xaa can only represent a single residue.</b> Please present the <b>maximum</b> number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.  |
| 6  | _____ PatentIn 2.0<br>“bug”              | A “bug” in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. <b>This applies to the mandatory &lt;220&gt;-&lt;223&gt; sections for Artificial or Unknown sequences.</b>   |
| 7  | _____ Skipped Sequences<br>(OLD RULES)   | Sequence(s) _____ missing. If intentional, please insert the following lines for <b>each</b> skipped sequence:<br>(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where “X” is shown)<br>(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)<br>(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where “X” is shown)<br>This sequence is intentionally skipped<br>Please also adjust the “(ii) NUMBER OF SEQUENCES:” response to <b>include</b> the skipped sequences. |
| 8  | _____ Skipped Sequences<br>(NEW RULES)   | Sequence(s) _____ missing. If <b>intentional</b> , please insert the following lines for <b>each</b> skipped sequence.<br><210> sequence id number<br><400> sequence id number<br>000  |
| 9  | _____ Use of n’s or Xaa’s<br>(NEW RULES) | Use of n’s and/or Xaa’s have been detected in the Sequence Listing.<br>Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n’s or Xaa’s are present.<br>In <220> to <223> section, please explain location of <b>n</b> or <b>Xaa</b> , and which residue <b>n</b> or <b>Xaa</b> represents.  |
| 10 | _____ Invalid <213><br>Response          | Per 1.823 of Sequence Rules, the only <b>valid</b> <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is <b>required</b> when <213> response is Unknown or is Artificial Sequence. (see item 11 below)   |
| 11 | _____ Use of <220>                       | <del>Sequence(s) _____ missing the &lt;220&gt; “Feature” and associated numeric identifiers and responses. Use of &lt;220&gt; to &lt;223&gt; is MANDATORY if &lt;213&gt; “Organism” response is “Artificial Sequence” or “Unknown.” Please explain source of genetic material in &lt;220&gt; to &lt;223&gt; section or use “chemically synthesized” as explanation. (See “Federal Register,” 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules</del>                              |
| 12 | _____ PatentIn 2.0<br>“bug”              | Please do not use “Copy to Disk” function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use “File Manager” or any other manual means to copy file to floppy disk.  |
| 13 | _____ Misuse of n/Xaa                    | “n” can <b>only</b> represent a single nucleotide; “Xaa” can <b>only</b> represent a single amino acid   |



IFWP

## RAW SEQUENCE LISTING

DATE: 05/17/2006

PATENT APPLICATION: US/10/578,493

TIME: 10:01:13

Input Set : A:\67987.000002.ST25.txt

Output Set: N:\CRF4\05172006\J578493.raw

3 <110> APPLICANT: Desire, Laurent  
 5 <120> TITLE OF INVENTION: BACE455, AN ALTERNATIVE SPLICE VARIANT OF THE HUMAN  
 6 BETA-SECRETASE  
 8 <130> FILE REFERENCE: 67987.000002  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/578,493  
 C--> 11 <141> CURRENT FILING DATE: 2006-05-05  
 13 <160> NUMBER OF SEQ ID NOS: 33  
 15 <170> SOFTWARE: PatentIn version 3.3  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 1368  
 19 <212> TYPE: DNA  
 20 <213> ORGANISM: Homo sapiens  
 22 <400> SEQUENCE: 1

23	atggcccaag	ccctgcccctg	gctcctgctg	tggatgggag	cgaggagtgt	gcctgcccac	60
25	ggcaccacag	acggcatccg	gctgcccctg	cgcagcggcc	tggggggcgc	ccccctgggg	120
27	ctgcggctgc	cccgggagac	cgacgaagag	cccaggagag	ccggccggag	gggcagcttt	180
29	gtggagatgg	tggacaacct	gaggggcaag	tgggggcagg	gctactacgt	ggagatgacc	240
31	gtgggcagcc	ccccgcagac	gctcaacatc	ctggtggata	caggcagcag	taactttgca	300
33	gtgggtgctg	ccccccaccc	cttcctgcat	cgctactacc	agaggcagct	gtccagcaca	360
35	taccgggacc	tccggaaggg	tgtgtatgtg	ccctacaccc	agggcaagtg	ggaaggggag	420
37	ctgggcaccg	acctggttaag	catcccccat	ggccccaacg	tactgtgctg	tgccaacatt	480
39	gctgccatca	ctgaatcaga	caagttcttc	atcaacggct	ccaactggga	aggcatcctg	540
41	gggctggcct	atgctgagat	tgccaggatc	attggaggta	tcgaccactc	gctgtacaca	600
43	ggcagctctc	ggtatacacc	catccggcgg	gagtggtatt	atgagggtcat	cattgtgcgg	660
45	gtggagatca	atggacagga	tctgaaaatg	gactgcaagg	agtacaacta	tgacaagagc	720
47	attgtggaca	gtggcaccac	caaccttcgt	ttgcccgaag	aagtgtttga	agctgcagtc	780
49	aaatccatca	aggcagcctc	ctccacggag	aagttccctg	atggtttctg	gctaggagag	840
51	cagctggtgt	gctggcaagc	aggcaccacc	ccttgggaaca	ttttcccagt	catctcactc	900
53	tacctaatgg	gtgaggttac	caaccagtcc	ttccgcacat	ccatccttcc	gcagcaatac	960
55	ctgcggccag	tggagatgtg	ggccacgtcc	caagacgact	gttacaagtt	tgccatctca	1020
57	cagtcaccca	cgggcactgt	tatgggagct	gttatcatgg	agggcttcta	cgttgtcttt	1080
59	gatcgggccc	gaaaacgaat	tggctttgct	gtcagcgtct	gccatgtgca	cgatgagttc	1140
61	aggacggcag	cggtggaagg	cccttttgct	accttggaca	tggaagactg	tggctacaac	1200
63	attccacaga	cagatgagtc	aacctcatg	accatagcct	atgtcatggc	tgccatctgc	1260
65	gccctcttca	tgctgccact	ctgcctcatg	gtgtgtcagt	ggcgtgcctc	ccgctgcctg	1320
67	cgccagcagc	atgatgactt	tgctgatgac	atctccctgc	tgaagtga		1368

70 <210> SEQ ID NO: 2  
 71 <211> LENGTH: 455  
 72 <212> TYPE: PRT  
 73 <213> ORGANISM: Homo sapiens  
 75 <400> SEQUENCE: 2

77	Met	Ala	Gln	Ala	Leu	Pro	Trp	Leu	Leu	Leu	Trp	Met	Gly	Ala	Gly	Val
78	1				5					10					15	

Does Not Comply  
 Corrected Diskette Needed  
 (pg-3,4)

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/578,493

DATE: 05/17/2006

TIME: 10:01:13

Input Set : A:\67987.000002.ST25.txt

Output Set: N:\CRF4\05172006\J578493.raw

```

81 Leu Pro Ala His Gly Thr Gln His Gly Ile Arg Leu Pro Leu Arg Ser
82          20          25          30
85 Gly Leu Gly Gly Ala Pro Leu Gly Leu Arg Leu Pro Arg Glu Thr Asp
86          35          40          45
89 Glu Glu Pro Glu Glu Pro Gly Arg Arg Gly Ser Phe Val Glu Met Val
90          50          55          60
93 Asp Asn Leu Arg Gly Lys Ser Gly Gln Gly Tyr Tyr Val Glu Met Thr
94 65          70          75          80
97 Val Gly Ser Pro Pro Gln Thr Leu Asn Ile Leu Val Asp Thr Gly Ser
98          85          90          95
101 Ser Asn Phe Ala Val Gly Ala Ala Pro His Pro Phe Leu His Arg Tyr
102          100          105          110
105 Tyr Gln Arg Gln Leu Ser Ser Thr Tyr Arg Asp Leu Arg Lys Gly Val
106          115          120          125
109 Tyr Val Pro Tyr Thr Gln Gly Lys Trp Glu Gly Glu Leu Gly Thr Asp
110          130          135          140
113 Leu Val Ser Ile Pro His Gly Pro Asn Val Thr Val Arg Ala Asn Ile
114 145          150          155          160
117 Ala Ala Ile Thr Glu Ser Asp Lys Phe Phe Ile Asn Gly Ser Asn Trp
118          165          170          175
121 Glu Gly Ile Leu Gly Leu Ala Tyr Ala Glu Ile Ala Arg Ile Ile Gly
122          180          185          190
125 Gly Ile Asp His Ser Leu Tyr Thr Gly Ser Leu Trp Tyr Thr Pro Ile
126          195          200          205
129 Arg Arg Glu Trp Tyr Tyr Glu Val Ile Ile Val Arg Val Glu Ile Asn
130          210          215          220
133 Gly Gln Asp Leu Lys Met Asp Cys Lys Glu Tyr Asn Tyr Asp Lys Ser
134 225          230          235          240
137 Ile Val Asp Ser Gly Thr Thr Asn Leu Arg Leu Pro Lys Lys Val Phe
138          245          250          255
141 Glu Ala Ala Val Lys Ser Ile Lys Ala Ala Ser Ser Thr Glu Lys Phe
142          260          265          270
145 Pro Asp Gly Phe Trp Leu Gly Glu Gln Leu Val Cys Trp Gln Ala Gly
146          275          280          285
149 Thr Thr Pro Trp Asn Ile Phe Pro Val Ile Ser Leu Tyr Leu Met Gly
150          290          295          300
153 Glu Val Thr Asn Gln Ser Phe Arg Ile Thr Ile Leu Pro Gln Gln Tyr
154 305          310          315          320
157 Leu Arg Pro Val Glu Asp Val Ala Thr Ser Gln Asp Asp Cys Tyr Lys
158          325          330          335
161 Phe Ala Ile Ser Gln Ser Ser Thr Gly Thr Val Met Gly Ala Val Ile
162          340          345          350
165 Met Glu Gly Phe Tyr Val Val Phe Asp Arg Ala Arg Lys Arg Ile Gly
166          355          360          365
169 Phe Ala Val Ser Ala Cys His Val His Asp Glu Phe Arg Thr Ala Ala
170          370          375          380
173 Val Glu Gly Pro Phe Val Thr Leu Asp Met Glu Asp Cys Gly Tyr Asn
174 385          390          395          400
177 Ile Pro Gln Thr Asp Glu Ser Thr Leu Met Thr Ile Ala Tyr Val Met

```

## RAW SEQUENCE LISTING

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DATE: 05/17/2006

TIME: 10:01:13

Input Set : A:\67987.000002.ST25.txt

Output Set: N:\CRF4\05172006\J578493.raw

```

178          405          410          415
181 Ala Ala Ile Cys Ala Leu Phe Met Leu Pro Leu Cys Leu Met Val Cys
182          420          425          430
185 Gln Trp Arg Cys Leu Arg Cys Leu Arg Gln Gln His Asp Asp Phe Ala
186          435          440          445
189 Asp Asp Ile Ser Leu Leu Lys
190          450          455
193 <210> SEQ ID NO: 3
194 <211> LENGTH: 6
195 <212> TYPE: PRT
196 <213> ORGANISM: artificial
198 <220> FEATURE:
199 <223> OTHER INFORMATION: distinctive fragment
201 <400> SEQUENCE: 3
203 Ile Ala Arg Ile Ile Gly
204 1 5
207 <210> SEQ ID NO: 4
208 <211> LENGTH: 7
209 <212> TYPE: PRT
210 <213> ORGANISM: artificial
212 <220> FEATURE:
213 <223> OTHER INFORMATION: distinctive fragment
215 <400> SEQUENCE: 4
217 Glu Ile Ala Arg Ile Ile Gly
218 1 5
221 <210> SEQ ID NO: 5
222 <211> LENGTH: 8
223 <212> TYPE: PRT
224 <213> ORGANISM: artificial
226 <220> FEATURE:
227 <223> OTHER INFORMATION: distinctive fragment
229 <400> SEQUENCE: 5
231 Glu Ile Ala Arg Ile Ile Gly Gly
232 1 5
235 <210> SEQ ID NO: 6
236 <211> LENGTH: 8
237 <212> TYPE: PRT
238 <213> ORGANISM: artificial
240 <220> FEATURE:
241 <223> OTHER INFORMATION: distinctive fragment
243 <400> SEQUENCE: 6
245 Ala Glu Ile Ala Arg Ile Ile Gly
246 1 5
249 <210> SEQ ID NO: 7
250 <211> LENGTH: 9
251 <212> TYPE: PRT
252 <213> ORGANISM: artificial
254 <220> FEATURE:
255 <223> OTHER INFORMATION: AEIARIIGG

```

Insufficient explanation.  
What is the source  
of genetic material.  
Pls see Item 11  
on Error Summary  
sheet.

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/578,493

DATE: 05/17/2006

TIME: 10:01:13

Input Set : A:\67987.000002.ST25.txt

Output Set: N:\CRF4\05172006\J578493.raw

257 <400> SEQUENCE: 7  
259 Ala Glu Ile Ala Arg Ile Ile Gly Gly  
260 1 5  
263 <210> SEQ ID NO: 8  
264 <211> LENGTH: 10  
265 <212> TYPE: PRT  
266 <213> ORGANISM: artificial  
268 <220> FEATURE:  
269 <223> OTHER INFORMATION: distinctive fragment  
271 <400> SEQUENCE: 8  
273 Ala Glu Ile Ala Arg Ile Ile Gly Gly Ile  
274 1 5 10  
277 <210> SEQ ID NO: 9  
278 <211> LENGTH: 9  
279 <212> TYPE: PRT  
280 <213> ORGANISM: artificial  
282 <220> FEATURE:  
283 <223> OTHER INFORMATION: distinctive fragment  
285 <400> SEQUENCE: 9  
287 Tyr Ala Glu Ile Ala Arg Ile Ile Gly  
288 1 5  
291 <210> SEQ ID NO: 10  
292 <211> LENGTH: 10  
293 <212> TYPE: PRT  
294 <213> ORGANISM: artificial  
296 <220> FEATURE:  
297 <223> OTHER INFORMATION: distinctive fragment  
299 <400> SEQUENCE: 10  
301 Tyr Ala Glu Ile Ala Arg Ile Ile Gly Gly  
302 1 5 10  
305 <210> SEQ ID NO: 11  
306 <211> LENGTH: 11  
307 <212> TYPE: PRT  
308 <213> ORGANISM: artificial  
310 <220> FEATURE:  
311 <223> OTHER INFORMATION: distinctive fragment  
313 <400> SEQUENCE: 11  
315 Tyr Ala Glu Ile Ala Arg Ile Ile Gly Gly Ile  
316 1 5 10  
319 <210> SEQ ID NO: 12  
320 <211> LENGTH: 18  
321 <212> TYPE: DNA  
322 <213> ORGANISM: artificial  
324 <220> FEATURE:  
325 <223> OTHER INFORMATION: probe  
327 <400> SEQUENCE: 12  
328 attgccagga tcattgga  
331 <210> SEQ ID NO: 13  
332 <211> LENGTH: 10

*Same error*

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## RAW SEQUENCE LISTING

DATE: 05/17/2006

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TIME: 10:01:13

Input Set : A:\67987.000002.ST25.txt

Output Set: N:\CRF4\05172006\J578493.raw

```

333 <212> TYPE: DNA
334 <213> ORGANISM: artificial
336 <220> FEATURE:
337 <223> OTHER INFORMATION: primer
339 <400> SEQUENCE: 13
340 aggcatacctg 10
343 <210> SEQ ID NO: 14
344 <211> LENGTH: 10
345 <212> TYPE: DNA
346 <213> ORGANISM: artificial
348 <220> FEATURE:
349 <223> OTHER INFORMATION: primer
351 <400> SEQUENCE: 14
352 gggctggcct 10
355 <210> SEQ ID NO: 15
356 <211> LENGTH: 10
357 <212> TYPE: DNA
358 <213> ORGANISM: artificial
360 <220> FEATURE:
361 <223> OTHER INFORMATION: primer
363 <400> SEQUENCE: 15
364 atgctgagat 10
367 <210> SEQ ID NO: 16
368 <211> LENGTH: 6
369 <212> TYPE: DNA
370 <213> ORGANISM: artificial
372 <220> FEATURE:
373 <223> OTHER INFORMATION: primer
375 <400> SEQUENCE: 16
376 tgccag 6
379 <210> SEQ ID NO: 17
380 <211> LENGTH: 6
381 <212> TYPE: DNA
382 <213> ORGANISM: artificial
384 <220> FEATURE:
385 <223> OTHER INFORMATION: primer
387 <400> SEQUENCE: 17
388 gatcat 6
391 <210> SEQ ID NO: 18
392 <211> LENGTH: 10
393 <212> TYPE: DNA
394 <213> ORGANISM: artificial
396 <220> FEATURE:
397 <223> OTHER INFORMATION: primer
399 <400> SEQUENCE: 18
400 tggaggtatc 10
403 <210> SEQ ID NO: 19
404 <211> LENGTH: 10
405 <212> TYPE: DNA

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/578,493

DATE: 05/17/2006  
TIME: 10:01:14

Input Set : A:\67987.000002.ST25.txt  
Output Set: N:\CRF4\05172006\J578493.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:33; Xaa Pos. 5

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29

Seq#:30,31,32,33



**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/578,493

DATE: 05/17/2006

TIME: 10:01:14

Input Set : A:\67987.000002.ST25.txt

Output Set: N:\CRF4\05172006\J578493.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:589 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0